PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of : Customer Number: 20277

Shunsuke HIJIKATA : Confirmation Number: 9940

Serial No.: 10/656.173 : Group Art Unit: 3663

Filed: September 08, 2003 : Examiner: Tuan C. To

For: DRIVING ASSIST SYSTEM FOR VEHICLE

STATEMENT ON SUBSTANCE OF INTERVIEW

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Docket No.: 061355-0046

Sir:

A telephonic interview was conducted on February 6, 2008 to discuss an office action issued on October 30, 2007. Differences between independent claims 2 and 14 and the cited prior art, and a request for reconsideration of restriction requirement related to claim 23, were discussed. A proposed amendment to claims 2 and 14 to improve wording was also presented.

Differences between the Claims and Cited Art

Applicants' representative pointed out that the combination of Ichikawa (U.S. Publication No. 2002/0045981) with Kato (U.S. Patent No. 6,059,068) and Minowa (U.S. Patent No. 5,902,345) fails to meet every limitation of claims 2 or 14 because the combination: (a) does not calculate risk potential, (b) does not provides a warning signal of the calculated risk potential by modifying a reaction force applied to a steering device or an accelerator pedal, and (c) does not disclose an external influence detection device configured to detect an external influence which will affect an operation of the steering device or the accelerator pedal by a driver, and (d) does not teach a reaction force correction device configured to correct the reaction force characteristics of the steering device

Serial No.: 10/656,173

or the accelerator pedal adjusted by the reaction force adjustment device, based upon detection results obtained by the external influence detection device.

The Examiner acknowledged that neither Ichikawa nor Kato describes calculation of risk potential, the conveyance of risk potential by adjusting a reaction force, or the further adjustment of the reaction force according to a detected external influence to better anticipate a driver's perception of the conveyed risk potential, but the Examiner cautioned that Kato appears to have adjusted a reaction force applied to a steering wheel based on a vehicle speed, and questioned how such adjustment relates to the claims. In response, Applicants' representative pointed out that while Kato incidentally utilizes a speed sensor 6 for detecting a running speed of the vehicle, Kato has no interest in determining or calculating a risk potential of the vehicle with the speed. Rather, Kato's adjustment of the reaction force of the steering wheel 2 is used merely for providing road feedback, which is known in the field of steering-by-wire and has nothing to do with conveying risk potential and further adjustment of the conveyed information according to detected external influences.

The combination of Ichikawa and Kato, at most, produces a vehicle with a dynamic control system intending to selectively enable various subsystems including a front-rear traction distribution control unit for four wheel drive vehicles, an anti-lock brake, a traction control unit and a braking power control unit (according to Ichikawa), and a steering by wire apparatus that changes a reaction force applied to a steering wheel based on a steering angle, a vehicle speed or an overload condition, to provide proper sense of road feedback (according to Kato). The other cited document, Minowa, does not alleviate these deficiencies. Minowa is only interested in modifying an engine output based on an operation of an accelerator pedal. However, Minowa has no interest in conveying a risk potential and has nothing to do with detecting a driver's perception of a reaction force generated at the steering device or the accelerator pedal. The combination of Ichikawa, Kato and

Serial No.: 10/656,173

Minowa, at most, disclose a vehicle with a system that dynamically adjusts traction distribution and brake in view of road conditions (Ichikawa), a steering by wire steering apparatus (Kato), and a dynamic control of engine output according to a depression condition of an accelerator pedal (Minowa), but does not meet the claimed limitations of independent claims 2 and 14.

The Examiner acknowledged the differences and agreed to point out in the Examiner's interview summary that the claims are at least somewhat different from the cited documents. However, the Examiner was not ready to make a final decision to withdraw the rejections on the spot, and cautioned that the final determination of patentability will be predicated on further review of the documents of record. The Examiner urged Applicants filing a response substantiating the arguments presented in the interview.

Request for Reconsideration of Restriction Requirement

During the interview, the examiner's decision to maintain a restriction requirement related claim 23 was discussed. Applicants' representative pointed out that contrary to the statements made in the Restriction Requirement and the Office Action, 37 CFR 1.145 and MPEP §821.03 do not apply to this application because 37 CFR 1.145 and MPEP §821.03 only applies in a scenario where a later added claim is distinct from and independent of the invention previously claimed ("If, after an office action on an application, the applicant presents claims directed to an invention distinct from and independent of the invention previously claimed, the applicant will be required to restrict the claims to the invention previously claimed." Emphases added. See MPEP §821.03). However, method claim 23 includes limitations closely tracking those of apparatus claim 2 and is not distinct and materially different from the invention described in apparatus claim 2. Therefore, 37 CFR 1.145 and MPEP §821.03 do not apply.

Serial No.: 10/656,173

Despite such deficiency of the Restriction Requirement, the Examiner was still of the view that 37 CFR 1.145 and MPEP §821.03 should apply, but nevertheless agreed to consider Applicants' arguments when they are presented in a response to the Office Action. Applicants' representative agreed to file a response to formally enter the arguments made during the interview.

Respectfully submitted.

McDERMOTT WILL & EMERY LLP

Wei-Chen Nicholas Chen Registration No. 56.665

Please recognize our Customer No. 20277 as our correspondence address.

600 13th Street, N.W. Washington, DC 20005-3096 Phone: 202.756.8000 WC:pab Facsimile: 202.756.8087

Date: February 11, 2008

WDC99 1528126-1.061355.0046